

REMARKS

Claims 10-27 are pending in the above-identified application, claims 12-27 having been added by this amendment.

Claims 10-11 were subject to a restriction requirement and to a requirement for election of species, to which Applicant responds as indicated below.

The one-month shortened statutory period for response expires on June 24, 2005. Accordingly, this response is being filed in a timely manner.

I. AMENDMENTS TO THE APPLICATION

Entry of the amendments to the claims is respectfully requested. As detailed below, they introduce no new matter.

Claim 10 is amended to correct minor typographical errors.

New claims 12-27, dependent on claim 10, recite specific combinations of sequences within claim 10 or specific numbers of nucleotide binding regions, also within claim 10. Accordingly, these claims introduce no new matter.

Therefore, entry of the amendments to the claims, including new claims 12-27, is respectfully requested.

II. THE RESTRICTION REQUIREMENT

Restriction to one of the following inventions has been required under 35 U.S.C. § 121:

Group I is claim 10, drawn to a zinc finger nucleotide binding polypeptide comprising 2 to 6 nucleotide binding regions selected from SEQ ID NOs: 17-110, classified in class 530, subclass 300.

Group II is claim 11, drawn to a composition comprising 2 to 12 nucleotide binding regions selected from SEQ ID NOs: 17-110, classified in class 514, subclass 12.

It was stated that the inventions were distinct because SEQ ID NOs: 17-110 differ in structure and in function; claims 10 and 11 were stated to be separated because the polypeptide (of claim 10) was stated to comprise 2 to 6 nucleotide binding regions selected from SEQ ID NOs: 17-110 within a single polypeptide sequence, while claim 11 was stated to be drawn to a composition of individual peptides selected from SEQ ID NOs: 17-110.

III. THE REQUIREMENT FOR ELECTION OF SPECIES

If Group I is elected, Applicant is required to elect 2 to 6 sequences selected from SEQ ID NOs: 17-110.

If Group II is elected, Applicant is required to elect 2 to 12 sequences also selected from SEQ ID NOs: 17-110.

IV. APPLICANT'S RESPONSE TO THE RESTRICTION REQUIREMENT

Applicant elects Group 1, claim 10, with traverse.

The restriction requirement is traversed on the following grounds:

The Examiner has not met the burden for demonstrating the necessity for restriction. M.P.E.P. § 803 requires for restriction both: (1) that the inventions are independent or distinct as claimed; and (2) that there would exist a “serious burden” on the Examiner if all of the claims were examined in one application. These requirements have not been met.

In fact, the subject matter of Groups I and II, claims 10 and 11, are sufficiently related to avoid restriction, because there would be no “serious burden” on the Examiner if all of the claims were examined together in one application. The essence of the invention is that specific nucleotide sequences can be targeted and specifically bound by modular zinc finger polypeptides, and that the particular nucleotide sequence targeted is determined by the amino acid residues at several positions of each zinc finger motif. By using multiple zinc finger motifs in a single polypeptide, nucleotide sequences that are longer can be specifically bound. Each zinc finger motif, of seven amino acids, corresponds to one triplet codon. The zinc finger polypeptides of the invention bind to codons of the general sequence GNN; in other words, codons in which the first nucleotide is guanine (G).

Accordingly, the subject matter of claim 11 is related to that of claim 10 because the polypeptides of claim 11 within the composition, even though separate, interact to bind multiple codons in much the same way as the polypeptide of claim 10. The fact that claim 11 specifies 2 to 12 regions, while claim 10 specifies 2 to 6 regions, does not mean that the subject matter of these claims is sufficiently unrelated to justify restriction.

Moreover, the subject matter of the inventions is sufficiently interrelated that no serious burden on the Examiner would exist if all of the claims were examined on the merits. This is because the art involved, if any relevant art exists, largely overlaps. For example, any publications describing the isolated zinc finger nucleotide binding motifs will likely recite their being linked into a larger molecule that binds a longer nucleotide sequence, the larger molecule being assembled in a modular manner. That being the case, there is no basis for restricting the claims based on presenting a “serious burden” to the Examiner for lack of a co-extensive search, despite the inventions being classified in classes 370, 714 and 370, as stated by Examiner.

Applicant does not traverse the restriction requirement on grounds of lack of patentable distinctness. Rather, Applicant traverses the restriction requirement on the grounds that the inventions of Groups I and II are sufficiently related that restriction is not properly required, despite the possible existence of patentable distinctness.

Therefore, the Examiner is respectfully requested to withdraw the restriction requirement, and allow claims 10 and 11 to be examined. The dependent claims that have been added, new claims 12-27, are dependent on claim 10, but analogous claims will be added that are dependent on claim 11 should the restriction requirement be withdrawn.

V. APPLICANT’S RESPONSE TO THE REQUIREMENT FOR ELECTION
OF SPECIES

Applicant response to the requirement for election of species by electing the following six sequences selected from SEQ ID NOs:17-110: SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, and SEQ ID NO: 37. All of these sequences have specific binding activity for the triplet GCC (see Figure 1B).

Claim 10 and the newly presented claims, claims 12-26, read on one or more of the sequences selected.

The requirement for election of species is traversed on the grounds that a generic claim, specifically claim 10, is allowable. Claim 10 encompasses a multiplicity of related species recited in the dependent claims. As indicated below, Applicant intends to add other claims as appropriate should the requirement for election of species be withdrawn.

Additionally, the requirement for election of species is traversed on the grounds that the species of the invention recited in all of the pending claims are so closely related that there is no proper basis for requiring such an election. M.P.E.P. § 806.03 states: “Where the claims of an application define the same essential characteristics of a *single* disclosed embodiment of an invention, restriction therebetween should never be required. This is because the claims are but different definitions of the same disclosed subject matter, varying in breadth or scope of definition.”

Here, all the claims are directed to particular zinc finger modules that are assembled into a larger zinc finger protein or polypeptide, sometimes described as a polydactyl protein or polypeptide. The details as to the particular sequences within each zinc finger module or the particular triplet codon bound specifically by each module do not alter the essential characteristics of the invention. Thus, the pending claims define the same essential characteristics of a single disclosed embodiment of the invention. The proposed requirement for election of species is arbitrary and is not based on structural or functional distinctions between the sequences that are recited as SEQ ID NOs: 17-110.

Applicant does not traverse the requirement for election of species on the grounds of lack of patentable distinctness between the species. Rather, Applicant traverses the requirement for election of species on the grounds that the relatedness of the

species precludes the requirement for election, notwithstanding possible patentable distinctness between the species.

Should the requirement for election of species be withdrawn, Applicant proposes to add additional claims as appropriate to define the invention with respect to the possible sequences covered.

VI. CONCLUSION

In conclusion, Applicant responds to the restriction requirement by election of Group I, claim 10, with traverse.

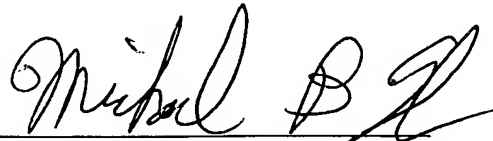
Applicant responds to the requirement for election of species by electing the following six sequences selected from SEQ ID NOs:17-110: SEQ ID NO: 32, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, and SEQ ID NO: 37, with traverse.

Appropriate action in light of this response is respectfully requested. Specifically, the new claims should be entered and examined on the merits, and Applicant should be given an opportunity to add additional claims should the restriction requirement or the requirement for election of species be withdrawn as requested.

If any issues remain, the Examiner is respectfully requested to telephone the undersigned at (858) 450-0099.

Respectfully submitted,

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